

CLAIMS

What is claimed is:

1. A method to display a route comprising a sequence of route segments to be traveled by a vehicle, the method comprising:
 - determining a position of the vehicle;
 - identifying a route segment on which the vehicle is located as a function of the position of the vehicle;
 - rendering the identified route segment using a graphic user interface (GUI); and
 - rendering a different one of the route segments using the GUI in response to a user input.
2. The method of claim 1, further comprising rendering a different one of the route segments using the GUI in response to movement of the vehicle.
3. The method of claim 1, wherein the GUI comprises:
 - a display area having a top edge; and
 - a graphic representation of the vehicle rendered within the display area.
4. The method of claim 3, wherein the graphic representation of the vehicle is substantially centered relative to the display area.
5. The method of claim 3, wherein the top edge of the display area is associated with one of a north cardinal direction and a forward direction of travel.
6. The method of claim 1, wherein rendering a different one of the route segments using the GUI in response to the user input comprises

rendering at least one of a previous route segment and a subsequent route segment using the GUI.

7. The method of claim 1, further comprising receiving the user input using at least one of a keypad, a knob, and an audio input device.

8. A method to display a route comprising a sequence of route segments to be traveled by a vehicle, the method comprising:
displaying a graphic representation of the vehicle and a route segment on which the vehicle is located using a graphic user interface (GUI);
receiving a user input; and
displaying one of a previous route segment and a subsequent route segment using the GUI in response to the user input.

9. The method of claim 8, further comprising updating the displayed route segment in response to movement of the vehicle.

10. The method of claim 8, wherein the GUI comprises a display area having a top edge.

11. The method of claim 10, wherein the graphic representation of the vehicle is substantially centered relative to the display area.

12. The method of claim 10, wherein the top edge of the display area is associated with one of a north cardinal direction and a forward direction of travel.

13. The method of claim 8, wherein the user input is received using at least one of a keypad, a knob, and an audio input device.

14. A navigation system for use in a vehicle, the navigation system comprising:

a display device;

a global positioning system (GPS) receiver configured to determine a position of the vehicle;

a data retrieval device configured to retrieve navigation data from a data storage medium, the navigation data representing a sequence of route segments; and

a processor-based subsystem operatively coupled to the GPS receiver, the data retrieval device, and the display device and configured to determine a position of the vehicle;

identify a route segment on which the vehicle is located as a function of the position of the vehicle;

render the identified route segment using a graphic user interface (GUI); and

render a different one of the route segments using the GUI in response to a user input.

15. The navigation system of claim 14, wherein the processor-based subsystem is further configured to render a different one of the route segments using the GUI in response to movement of the vehicle.

16. The navigation system of claim 14, wherein the GUI comprises:

a display area having a top edge; and

a graphic representation of the vehicle rendered within the display area.

17. The navigation system of claim 16, wherein the graphic representation of the vehicle is substantially centered relative to the display area.

18. The navigation system of claim 16, wherein the top edge of the display area is associated with one of a north cardinal direction and a forward direction of travel.

19. The navigation system of claim 14, wherein rendering a different one of the route segments using the GUI in response to the user input comprises rendering at least one of a previous route segment and a subsequent route segment using the GUI.

20. The navigation system of claim 14, further comprising an input device, the input device comprising at least one of a keypad, a knob, and an audio input device.

21. A navigation system for use in a vehicle, the navigation system comprising:

- a display device;

- an input device;

- a global positioning system (GPS) receiver configured to determine a position of the vehicle;

- a data retrieval device configured to retrieve navigation data from a data storage medium, the navigation data representing a sequence of route segments; and

- a processor-based subsystem operatively coupled to the GPS receiver, the data retrieval device, the display device, and the input device and configured to

- display a graphic representation of the vehicle and a route segment on which the vehicle is located using a graphic user interface (GUI);

- receive a user input using the input device; and

- display one of a previous route segment and a subsequent route segment using the GUI in response to the user input.

22. The navigation system of claim 21, wherein the processor-based subsystem is further configured to update the displayed route segment in response to movement of the vehicle.

23. The navigation system of claim 21, wherein the GUI comprises a display area having a top edge.

24. The navigation system of claim 23, wherein the graphic representation of the vehicle is substantially centered relative to the display area.

25. The navigation system of claim 21, wherein the top edge of the display area is associated with one of a north cardinal direction and a forward direction of travel.

26. The navigation system of claim 21, wherein the input device comprises at least one of a keypad, a knob, and an audio input device.

27. A processor-readable medium containing processor-executable instructions that, when executed by a processor-based system in a vehicle, cause the processor-based system to:

determine a position of the vehicle;

retrieve route information representing a route comprising a sequence of route segments;

identify a route segment on which the vehicle is located as a function of the position of the vehicle;

render the identified route segment using a graphic user interface (GUI); and

render a different one of the route segments using the GUI in response to a user input.

28. The processor-readable medium of claim 27, wherein the processor-executable instructions, when executed by the processor-based system, further cause the processor-based system to render a different one of the route segments using the GUI in response to movement of the vehicle.

29. The processor-readable medium of claim 27, wherein the GUI comprises:

- a display area having a top edge; and
- a graphic representation of the vehicle rendered within the display area.

30. The processor-readable medium of claim 29, wherein the graphic representation of the vehicle is substantially centered relative to the display area.

31. The processor-readable medium of claim 29, wherein the top edge of the display area is associated with one of a north cardinal direction and a forward direction of travel.

33. The processor-readable medium of claim 28, wherein the processor-executable instructions, when executed by the processor-based system, further cause the processor-based system to render one of a previous route segment and a subsequent route segment using the GUI.

34. A processor-readable medium containing processor-executable instructions that, when executed by a processor-based system in a vehicle, cause the processor-based system to:

- retrieve route information representing a route comprising a sequence of route segments;

- display a graphic representation of the vehicle and a route segment on which the vehicle is located using a graphic user interface (GUI);

- receive a user input; and

display one of a previous route segment and a subsequent route segment using the GUI in response to the user input.

35. The processor-readable medium of claim 34, wherein the processor-executable instructions, when executed by the processor-based system, further cause the processor-based system to update the displayed route segment in response to movement of the vehicle.

36. The processor-readable medium of claim 34, wherein the GUI comprises a display area having a top edge.

37. The processor-readable medium of claim 36, wherein the graphic representation of the vehicle is substantially centered relative to the display area.

38. The processor-readable medium of claim 34, wherein the top edge of the display area is associated with one of a north cardinal direction and a forward direction of travel.